Preface

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http://ehpnet1.niehs.nih.gov/docs/2002/suppl-3/335colborn/abstract.html

The peer reviewed articles in the issue of *Environmental Health Perspectives Supplements* were prepared for the work session "Impact of Endocrine Disruptors on Brain Development and Behavior" at the Ettore Majorana Centre for Scientific Culture, International School of Ethology, Erice, Sicily. Originally scheduled for 15–20 September 2001, in the immediate aftermath of the terrorist attacks in the United States, the gathering was postponed to 15–20 March 2002. This work session followed a previous session, "Environmental Endocrine-Disrupting Chemicals: Neural, Endocrine, and Behavioral Effects," also held at the School of Ethology in November 1995. The scientists attending the 1995 Erice work session produced a Consensus Statement reflecting their concern about the effects of synthetic chemicals on brain development. The opening paragraph of that Statement reads:

> We are certain of the following:
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> Endocrine-disrupting chemicals can undermine neurological and behavioral development and subsequent potential of individuals exposed in the womb, or in fish, amphibians, reptiles, and birds, the egg. This loss of potential in humans and wildlife is expressed as behavioral and physical abnormalities. It may be expressed as reduced intellectual capacity and social adaptability, as impaired responsiveness to environmental demands, or in a variety of other functional guises. Widespread loss of this nature can change the character of human societies or destabilize wildlife populations. Because profound economic and social consequences emerge from small shifts in functional potential at the population level, it is imperative to monitor levels of contaminants in humans, animals, and the environment that are associated with disruption of the nervous and endocrine systems and reduce their production and release.

The concerns reflected in the Consensus Statement from the first meeting led to additional research, the results of which are presented in the following peer-reviewed articles. They also led to the convening of this second work session where the goal was not to produce a new consensus statement, but rather to *a*) stimulate discussion about the development of screens and assays to test chemicals for their possible effects through hormone systems on the developing brain and behavior and *b*) to facilitate further collaborations among the many disciplines, institutions, and individuals attending the work session.

The articles in this issue of the *Supplement* are grouped into three categories: *a*) disruption of the thyroid system, *b*) endocrine disruption by polychlorinated biphenyls and dioxins, and *c*) disruption of estrogen and androgen responses.

As noted earlier, the actual work session for which these papers were prepared was postponed by 6 months. However, we had made a commitment to the editors of *Environmental Health Perspectives* to have a monograph ready by January 2002 for the June edition of the *Supplement* based on the presentations to have been given in September 2001. We regret that since this edition was already in the hands of the editors prior to the March 2002 gathering in Erice, it is impossible to describe at this time the impact the these papers had on the discussion and outcome of the work session.

We are quite certain that the scientific and policy impact of the work session in March 2002 was more productive than we had initially expected for several reasons: *a*) The preparation of the manuscripts for this edition of the *EHP Supplement* placed us at an advantage as we began to set the agenda for the discussions to take place in March 2002. We had a preview of what was coming that went far beyond the abstracts submitted in the early stages of planning the gathering. *b*) The need for a copy-ready manuscript prior to the meeting challenged each discussant to maximally polish his or her paper without the feedback he or she would have received at the postponed Erice work session. Consequently, work session participants were especially well prepared for the meeting. *c*) Finally, we believe the events of September 11 have reinforced the need to disseminate the information in the following pages. They have motivated and further encouraged us to broaden our knowledge about the developing brain and its vulnerability to xenobiotics. For it is imperative that we assure that all children are born with the ability to love, socially integrate, and reach their fullest intellectual potential—because what the world needs now more than ever are team players, great thinkers, and leaders who can bring peace to the world.

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